Daily Operating System (DOS) administration guide

DOS publications

1 DOS fact sheet

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Contents

1. Purpose

The purpose of the *Daily Operating System administration guide* is to present health services with the four key elements needed for the successful implementation of a Daily Operating System (DOS):

- Leadership

- Tiered huddle structure

- Visual practice management

- Daily readiness assessment.

The guide will not tell health services *how* to implement a Daily Operating System, as each health service needs to adopt a DOS process, which is relevant for their own organisation.

1.1. How does a DOS fit within your health service?

A DOS can fit within any organisation in a number of different ways. The primary objective of a DOS is to ensure the alignment of daily operational activities and strategic activities with the organisation's objectives. Figure 1 illustrates this connection.

Figure 1: How a Daily Operating System fits within an organisation

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2. Introduction to DOS

2.1. What is a Daily Operating System?

A Daily Operating System is a way of working to help a health service answer the fundamental question, 'Are we ready today – if not, why not?'. In the healthcare context, this is a critical question to help improve patient care, access and flow. This does not mean that this question cannot be answered in another way, however health services with a DOS in place are able to speed up their answer to this question in a structured, whole-of-organisation oversight way.

A DOS provides the visibility of today's operations and allows problems to be identified quickly. Frontline staff are empowered to solve these problems daily, and the problems they cannot fix are escalated, allowing countermeasures to be created quickly.

A DOS is known as a Daily Management System (DMS) in other industries. However, there are usually more elements included in a DMS, which are not as relevant for health services.

For a DOS to work effectively in the healthcare context, it is recommended that the following elements be present.

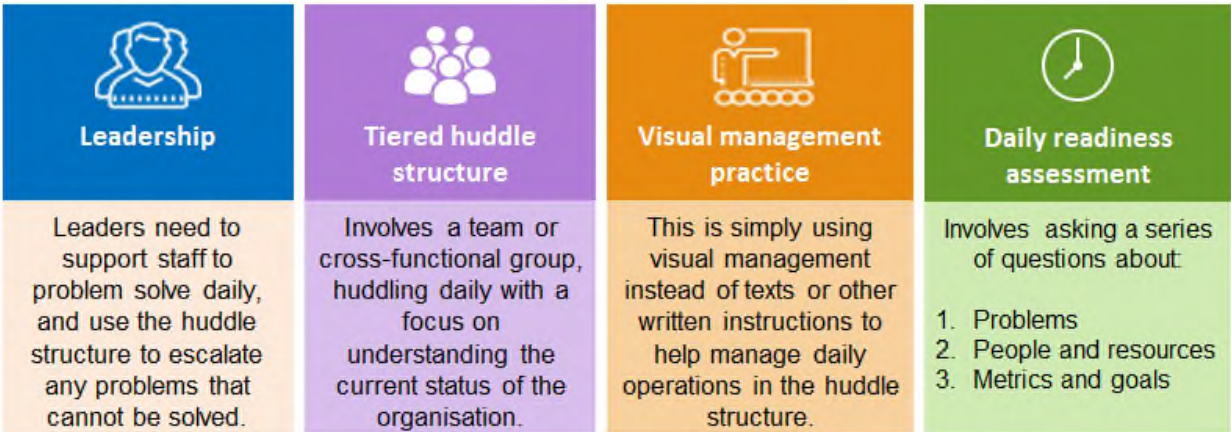| Leadership	Tiered huddle structure	Visual management practice	Daily readiness assessment
Leaders need to support staff to problem solve daily, and use the huddle structure to escalate any problems that cannot be solved.	Involves a team or cross-functional group, huddling daily with a focus on understanding the current status of the organisation.	This is simply using visual management instead of texts or other written instructions to help manage daily operations in the huddle structure.	Involves asking a series of questions about: 1. Problems 2. People and resources 3. Metrics and goals

Figure 2: Elements of a Daily Operating System

2.2.   What is the value of using a Daily Operating System?

Having a Daily Operating System in place can help health services to:

- Answer the question, 'Are we ready today – if not, why not?' quicker, increasing the pace at which problems are raised and solved.

- Have greater whole-of-organisation oversight, increasing everyone's awareness of the whole system, and improving teamwork and coordination of effort.

- Have regular, structured communication about daily operations and performance.

- Improve staff morale and accountability. Anecdotal reports indicate that staff feel like their problems are being heard and addressed.

- Break down organisational silos and improve teamwork and coordination of effort.

- Better work planning and resource allocation.

- Build capability in staff to ask better questions.

- Promote openness and transparency in raising issues.

- Promote a proactive approach to problem solving, rather than simply reacting to issues.

- Have better quality monitoring, as senior leaders are aware of the current state of performance.

- Gain access to the right people for troubleshooting, resulting in timely problem solving.

Figure 3: The value of a Daily Operating System

2.3. Who participates in a Daily Operating System?

Figure 4 describes the role of Victoria's health services in relation to a Daily Operating System. It is recommended that senior executives play a key role in supporting and driving this new way of working. The system will not be effective without whole-of-organisation buy-in and participation.
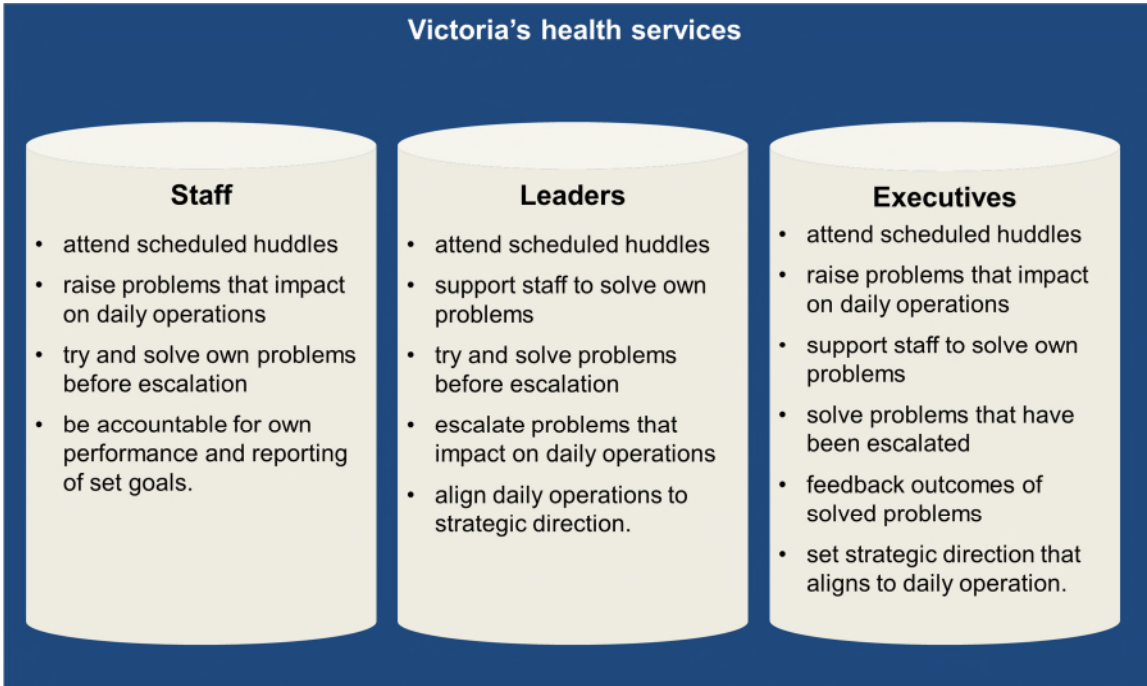

Figure 4: Daily Operating System participants

2.4. How does a Daily Operating System link with strategic plans and priorities?

Implementing a Daily Operating System can help a health service align daily operations to long-term strategic objectives. Health services need to consider the focus of their daily readiness assessment to achieve the organisation's strategic objectives.

A common question asked as part of the daily readiness assessment is around metrics and goals. The metrics and goals should align to the organisation's long-term strategic priorities. For example, if a health service has a strategic objective to reduce harm to patients, what are they doing on a daily basis to achieve this? The DOS should ensure oversight of this objective on a daily basis.

3. Key components of a Daily Operating System

A Daily Operating System has two key components – supporting elements and a daily readiness assessment. It is recommended that these two components be present for a DOS to work effectively.

The primary goal of a DOS is to determine if – as a whole organisation – we are ready to deliver care today. This goal can be achieved when the two components are working together.
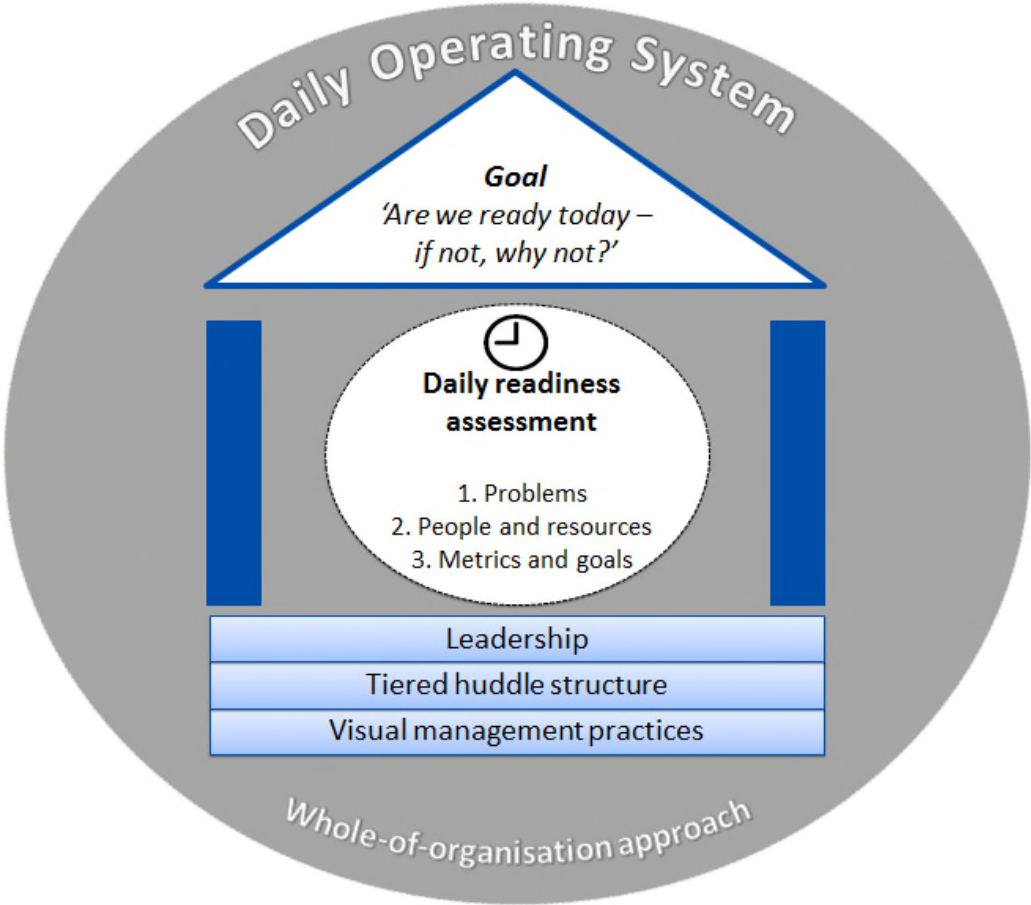

Figure 5: Daily Operating System

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3.1. Supporting elements

The supporting elements are fundamental to making a Daily Operating System work. Figure 6 outlines the supporting elements.
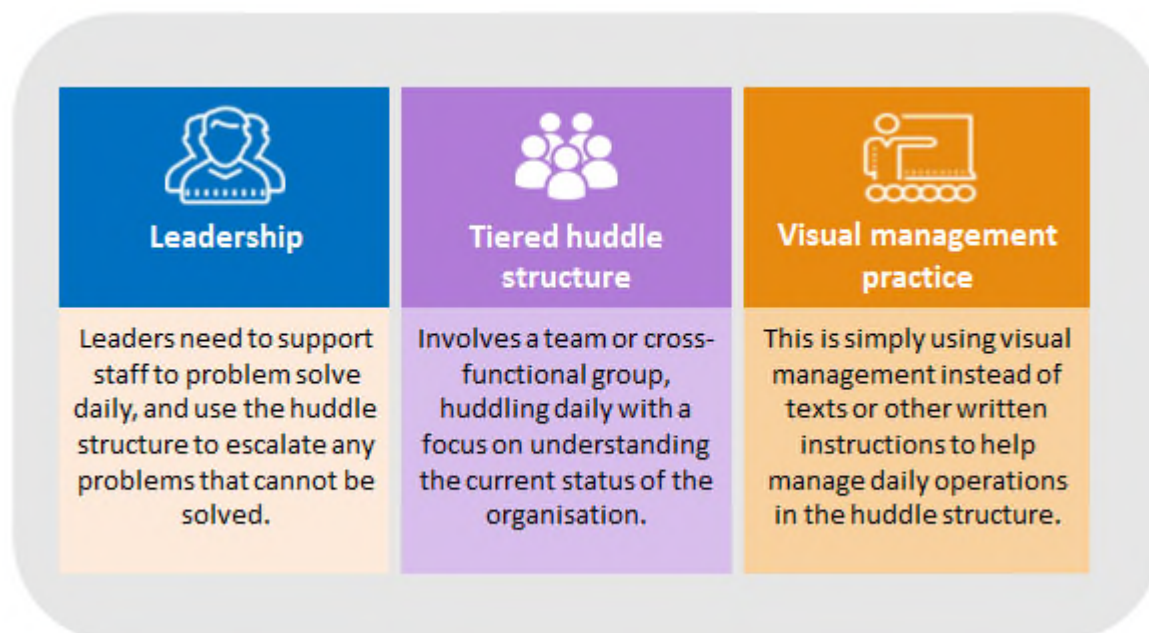

Figure 6: Daily Operating System supporting elements

The supporting elements are described as follows:

- **Leadership** – leaders need to change their way of working for a Daily Operating System to work effectively. They need to support their staff to problem solve on a daily basis. If these problems cannot be solved, leaders then need to escalate the problems through the tiered huddle structure.

- **Tiered huddle structure** – usually involves a team or cross-functional group, coming together every day for a short, targeted discussion, with a focus on understanding the current status of the organisation. For huddles to be most effective, there should be a tiered structure to enable escalation, with a standard format and clearly defined components (for example, duration, venue, roles, responsibilities). Problems are identified at these huddles. If the staff in the huddle cannot solve them, it is the leader's responsibility to escalate to the next huddle level. The huddle process can contribute significantly to team formation, coordination of effort and accountability of problems.

- **Visual management practice** – the purpose of this supporting element is to help drive conversations and promote problem solving. It involves using visual signals, instead of texts or other written instructions, and should enable quick recognition of the information, in order to increase efficiency and clarity. The focus of visual management practice should be about the discussion that supports it, rather than the activity of updating the visual management.

3.2. Daily readiness assessment

The daily readiness assessment is conducted every day in the tiered huddle structure, to help the health service answer the question, 'Are we ready today – if not, why not?'. The assessment involves asking a series of questions that help operational management. The questions asked should align to the organisation's strategic objectives. Figure 7 summarises the most common questions asked in a daily readiness assessment.
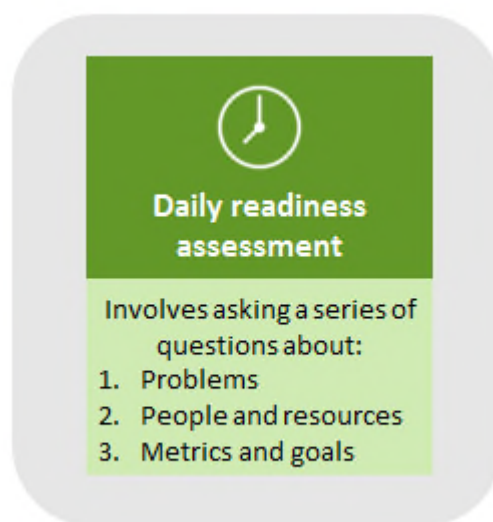

Figure 7: Daily Operating System daily readiness assessment

The most common daily readiness assessment questions are described below:

- **Problems** – the primary objective of a Daily Operating System is to solve the problems that prevent the health service from being 'care ready' on a daily basis. Staff are expected to solve any problems that impede their ability to deliver care that day. If a problem cannot be solved at a huddle, it is the leader's responsibility to escalate the problem to the next huddle level. The tiered huddle structure provides a way for problems to be escalated and feedback from outcomes of the problems returned.

- **People and resources** – for a health service to know if they are ready to deliver care that day, there needs to be a discussion about whether or not the right people and resources are available to deliver this care. The question, 'Do we have enough staff and resources today?', is asked in the tiered huddle every day. It is the responsibility of the staff attending each huddle to raise any issues or concerns they have about people or resources.

- **Metrics and goals** – the final readiness assessment is about the organisation's performance and should be linked to the organisation's strategic objectives. Performance is determined by asking the questions, 'How did we go yesterday?' and 'What is our goal today?'.

4. Implementing a Daily Operating System

This section provides recommendations for health services considering the implementation of a Daily Operating System. It covers considerations, key high-level phases, implementation options and implementation challenges. This section will not explain *how* to do this, as each health service needs to make the system relevant for their own organisation.

A key finding from the health services that have already implemented a Daily Operating System is: don't let perfection get in your way of doing something, just start somewhere and build a structure to regularly review and improve this system. Currently, Eastern Health is the only health service that has evaluated their DOS. The final evaluation (conducted by Monash University) findings have not yet been released. Preliminary insights however, align to these recommendations.

4.1. Implementation considerations

There are a number of considerations that health services should think about prior to implementing a Daily Operating System. Figure 8 presents the considerations as questions, structured around each of the key elements. Health services should consider the answers to these questions and reflect on how they relate to their organisation.

Figure 8: Implementation considerations

4.1.1. Leadership

Health services need to consider what the leadership support and structure will look like when implementing a Daily Operating System. Without leadership to support this way of working, the system will not be successful.

Questions to consider include:

- What huddles will your leaders be required to attend?
- What is your daily leader's standard work to support this? For example, what agreed way of working must your leaders follow?

4.1.2. Tiered huddle structure

The huddles need to be structured in a way that enables staff to raise problems and also to facilitate the daily readiness assessment. This is best done via a tiered huddle structure. The number of tiered huddles, frequency and focus for each huddle will be different for each health service. It should be implemented based on organisational needs.

Questions to consider include:

- How many tiers will be required?
- What will be discussed at each tier?
- Who needs to attend what tier?

4.1.3. Visual management practice

Visual management should be used to support huddle conversations and make the outcomes visible. It should be simple and placed somewhere that can be seen by all who needs to see it. Health services need to consider what visual management is needed to support this way of working.

Questions to consider include:

- Will it be digital or manual?
- How will the information be displayed?
- When will it be updated?
- Who will update the information?

4.1.4. Daily readiness assessment

The daily readiness assessment needs to cover the key questions that must be asked for a health service to know if they are care ready. These questions should also link to the organisation's long-term strategic objectives.

Assessment questions are commonly around:

- problems
- people and resources
- metrics and goals.

4.1.5. Other activities

A health service needs to consider its own organisational requirements, and any other supporting activities prior to the rollout of a Daily Operating System.

Questions to consider include:

- Will you pilot the Daily Operating System within a specific area or will you roll it out to the entire organisation at once?

- What support will be provided to the impacted areas? (Remember for some people, this will potentially be a new way of working.)

- What support is needed to rollout this new way of working?

- What capability building needs to occur before the rollout? For example, problem solving (improvement framework)?

4.2. Key high-level phases to implementation

Each health service will select the best way to implement a Daily Operating System to suit their own needs. However, there are some key high-level phase steps we recommend going through prior to implementation. The steps are outlined in Figure 9.
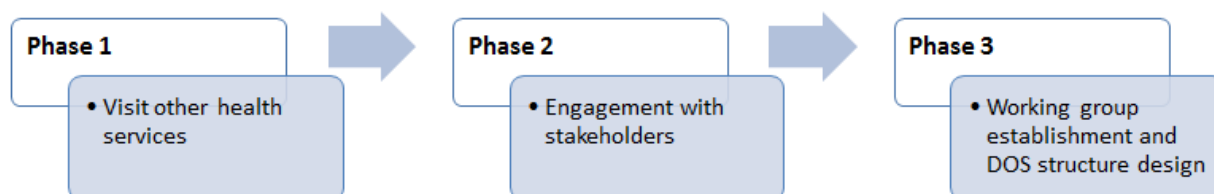

Figure 9: High-level phases to implementation

- **Phase 1:** Visit other health services that already have a Daily Operating System in place. Discover how they went about implementation, what challenges they experienced and source any templates or tools they used.

- **Phase 2:** Engage with the key stakeholders in your health service. For this system to be effective, it will require the whole organisation to change its way of working. Proper engagement and agreement that this new approach is the way forward needs to be gained. An accompanying Daily Operating System factsheet and presentation slide template can be used for this engagement. These tools can be branded and adapted to suit your own health service's needs.

- **Phase 3:** Form a working group to determine the design and structure of a Daily Operating System that suits your health service's needs. For example, the number of tiers, purpose of each tier, timing of tiers, frequency of tiers, who's required at each tier, questions to be asked at each tier, agreement to the ways of working at each tier, templates to be used and rollout structure (whole-of-organisation or individual wards?).

Your health service should be ready to commence implementation once the three phases are complete.

4.3. Implementation structure options

There a number of different structure options for a Daily Operating System. It's up to the health service to design a structure that suits their own needs. The structure options should be workshopped and agreed upon by a working group. The outcomes should be tested with the relevant key parties.

Figure 10 provides the Daily Operating System structures used in four Victorian health services.

Figure 10 Glossary

ACAS	Aged Care Assessment Service
AH	Allied Health
ANUM	Associate Nurse Unit Manager
CEO	Chief Executive Officer
Clin.	Clinical
COO	Chief Operations Officer
Direct./Dir.	Director
EDMS	Executive Director of Medical Services
EDON	Executive Director of Nursing
Exec.	Executive
GM	General Manager
HIS	Hospital Information Services
HR	Human Resources
Imag.	Imaging
IT	Information Technology
JMO	Junior Medical Officer
NIC	Nurse in Charge
NUM	Nurse Unit Manager
Ops.	Operations
Path.	Pathology
Pharm.	Pharmacy
PSM	Patient Services Manager
Rep.	Representative
Serv./Ser.	Services
T1	Tier 1 Huddle
T2	Tier 2 Huddle
T3	Tier 3 Huddle
T4	Tier 4 Huddle

Figure 10: Daily Operating System structures

	Huddle Structure / Frequency	Who attends	Length active	Approach to roll-out
Eastern Health	**4 x tiers:** T1: Btw 8-9am T2: 9:15 am (All sites) T3: 10:30am T4: 11:00am	T1: NUM/ANUM, Program Direct. each ward T2: NUMs, Program Direct., Hospital Coordinators, Support serv. T3: Clinical Directorates, Clinical Services Exec. Direct. (x2), Program Direct., Direct. Patient Access, Direct. of Clinical Support serv. (Path., Imag., Pharm., AH rep, T4: All Executives, CEO	**18 months**	Driven by Exec. Directors of clinical services & CEO. Had detailed implementation plan for the whole org., owned by Director of patient access & provided capability building for the site chiefs who were responsible for implementation. Redesign team provided support throughout.
Peninsula Health	**2 x tiers +:** T1: Btw 8-9am (daily, weekends 8-12pm) T2: 9:45am (daily) **Imp Huddle**: 2pm (weekly/Thur)	T1: NUM, Ops. Direct. (PSM & ANUM on weekends), Ideal: AH rep, ANUM, Pharm., Medical staff T2: CEO, Ops. & Clin. Dir,COOs, EDON, EDMS, Rad/Path. Pharmacy, HR, IT, Facilities, Support ser, Supply, HIS, Finance **+Imp Huddle:** Exec, Ops. & Clin. Dir, Ops ad hoc participants, open invitation.	**4 months**	Visited x3 other health services. Held design workshop, to create our own system. Opt. for whole organisation, rapid roll-out, starting with T1s, then quickly introduced T2. Refined T2 daily for few months. Now trying to get T3 up and running, but the slow cadence (fortnightly) is a challenge.
St Vincent's Hospital Melbourne	**3 x tiers:** T1: Btw 8-10am (daily) T2: 10:20am (daily) T3: Performance Board 11am (weekly/Wed)	T1: NUM, NIC, AH rep, Medical rep, ACAS (as req'd), General Manager T2: All clinical GMs, Access Manager, Head of Medicine (not all days), Head of Surgery (not all days), IT, HR, Engineering, Clinical Executive Direct. T3: All GMs, All Executives, Chief Medical Officer, CEO, All staff (optional).	**5 months**	CEO/Directors sponsored. T3 rolled out first to start the problem solving discussions at senior management level. Phased roll out of Tier 1and 2 - timing controlled by local GMs and NUMs. High level guidance and support provided but local areas were free to use the T1 largely how they felt it would add value.
Northern Health	**4 x tiers:** T0: Day before 3-4pm T1: First thing, morning T2: 9:30am T3: 11am (Teleconference all sites)	T0: NIC, JMO (this is not consistent across all wards), AH rep. T1: Ops Direct., NIC/NUM. T2: All Ops Direct., AH rep, Access Team, Nursing workforce, Infection Prevention Team, Support Serv, Pharm. T3: All GMs.	**7 months**	Visited Eastern and decided roll out to the whole organisation – very short turnaround (6 weeks), small working group worked out all the details. Official launch on a Friday afternoon with all relevant stakeholders ,then go live the next Tuesday.

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4.4. Implementation challenges

Like all new ways of working, there will be some challenges that a health service needs to consider. The following challenges are not the only challenges your organisation might face, but have been identified as the most important ones.

4.4.1. Strategic direction implications

The Daily Operating System needs to align with the strategic direction of the organisation. The daily readiness assessment needs to factor in the strategic direction of the health service and ensure that the questions are asked daily, to align operational management with the strategic direction of the organisation.

4.4.2. Systemic issues

As part of establishing a Daily Operating System, health services need to determine a way to identify and manage systemic issues within this new way of working. If the problems identified through this structure as systemic, it can sometimes be a challenge to address them.

4.4.3. Improvement framework

An established improvement framework is highly recommended for an effective Daily Operating System. Without a structured way to problem solve, root-cause problem solving might not occur, problems might take longer than planned to fix and the wrong people might be solving the problems. However, we recommend that a health service doesn't delay implementing a Daily Operating System, even if they don't have an improvement framework. The framework can be formed after the Daily Operating System is in place, together with on-the-job capability building.

4.4.4. Whole-of-organisation oversight

Some health services have experienced a lack of medical input in Daily Operating System huddles. All areas of the health service need to be part of the system for it to be most effective.

4.4.5. Data management

It is important to get the right data to provide the information that leaders need to know, rather than reporting on data that is interesting. This may at times, impact on leaders reacting to normal variation. It's essential for leaders to be able to distinguish when to react.

4.4.1. Acceptance to a change in the way of working

The Daily Operating System structure empowers leaders and staff to address problems, discuss people and resourcing and talk about performance every day. For some health services, this level of transparency and way of working would not normally occur and could potentially be challenging.

Further information

For further information about implementing a Daily Operating System, contact the Safer Care Victoria team < bcv@safercare.vic.gov.au> or call 03 9096 2761.